IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Assistant Commissioner for Patents Washington, DC 20231 | # 17/11.T. Revoc. W/P.O.A. |
|--|------------------------------------|
| Sir: POWER OF ATTORNEY WITH REV | OCATION AND |
| CHANGE OF CORRESPONDENCE | |
| | |
| I hereby revoke all previous powers of attorney or aut | thorizations of agent given in the |
| applications/patents identified in Table A attached hereto, a | and appoint |
| LX I Decatition and Chattamar Number | 4138 |
| as my/our attorney(s) or agent(s) to prosecute the application and to transact all business in the United States Patent and therewith. | |
| Please change the Correspondence Address for the ap | plications/patents identified in |
| Practitioners at Customer Number: 34138 | |
| I am the: | |
| Applicant/Inventor. | |
| Assignee of record of the entire interest. (A state is enclosed.) | tement under 37 CFR 3.73(b) |
| Respectfully submitte | d, |
| ISIS PHARMACEUT | |
| Date: 3/27/03 By: | |

Name: B. Lynne Parshall

Title: Executive Vice President

O:VPATENTS/ZIPS/COZEN/ISISPOA_031803.doc

| Serial No. Patent No. Docket No. | Filing Date Issue Date | Inventor(s) | Examiner | Art Unit | Title |
|---|---------------------------|-------------------|--------------|----------|--|
| 08/659,440 5,898,031 (ISIS0002-100) | 06/06/1996 04/27/1999 | S. Crooke | J. LeGuyader | 1809 | OLIGORIBONUCLEOTIDES FOR CLEAVING RNA |
| 08/870,608 6,107,094 (ISIS0002-101) | 06/06/1997 08/22/2000 | S. Crooke | S. McGarry | 1635 | OLIGORIBONUCLEOTIDES AND RIBONUCLEASES FOR CLEAVING RNA |
| 09/479,783 (ISIS0002-102) | 01/07/2000 | S. Crooke | S. McGarry | 1635 | OLIGORIBONUCLEOTIDES AND RIBONUCLEASES FOR CLEAVING RNA |
| 10/078,949 (ISIS0002-103) | 02/20/2002 | S. Crooke | Unknown | 1635 | OLIGORIBONUCLEOTIDES AND RIBONUCLEASES FOR CLEAVING RNA |
| 09/900,425 (ISIS0003-100) | 07/06/2000 | H. Wu et al. | S. McGarry | 1635 | HUMAN RNASE III AND COMPOSITIONS AND USES THEREOF |
| 10/079,185 (ISIS0003-101) | 02/20/2002 | S. Crooke | Unknown | 1635 | HUMAN RNASE III AND COMPOSITIONS AND USES THEREOF |
| 10/199,674 (ISIS0035-100) | 07/19/2002 | L. Cowsert et al. | Unknown | 1646 | ANTISENSE MODULATION OF PROTEIN KINASE C-10TA EXPRESSION |
| 10/177,554 (ISIS0036-100) | 06/20/2002 | K. Dobie et al. | Unknown | 1645 | ANTISENSE MODULATION OF PRL-3 EXPRESSION |
| 10/188,646 (ISIS0037-100) | 07/02/2002 | F. Bennett et al. | Unknown | 1642 | ANTISENSE MODULATION OF LIVIN EXPRESSION |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents Washington, DC 20231

Sir:

STATEMENT UNDER 37 CFR 3.73(b)

Applicant, ISIS Pharmaceuticals, Inc., a corporation, states that it is:

the assignee of the entire right, title, and interest of the applications identified in Table A attached hereto.

The extent (by, percentage) of its ownership interest is 100% in the patent applications identified in Table A.

a copy of the pertinent assignment from the inventor(s) of the patent applications identified in Table A is enclosed herewith.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Respectfully submitted,

ISIS PHARMAÇEUTICALS, INC.

Date: 3/27/03

Name: B. Lynne Parshall

Title: Executive Vice President



ISPH-0522

15150003.100

JANUARY 03, 2002

PTAS

Chi f Financial Officer and Chief Administrativ Officer Washington, DC 20231 www.uspto.gov

LICATA & TYRRELL P.C. KATHLEEN A. TYRELL 66 E. MAIN STREET MARLTON, NJ 08053



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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2001

REEL/FRAME: 012268/0348

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

WU, HONJIANG

DOC DATE: 10/03/2001

ASSIGNOR:

CROOKE, STANLEY T.

DOC DATE: 10/03/2001

ASSIGNEE:

ISIS PHARMACEUTICALS, INC. 2292 FARADAY AVENUE CARLSBAD RESEARCH CENTER CARLSBAD, CALIFORNIA 92008

SERIAL NUMBER: 09900425

FILING DATE: 07/06/2001

PATENT NUMBER: ISSUE DATE:

SHARON BROOKS, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS DOCKET NO.: ISPH-0522 PATENT

ASSIGNMENT

WHEREAS, We, Honjiang Wu, of Carlsbad, State of California and Stanley T. Crooke, of Carlsbad, State of California have invented a certain invention entitled Human RNase III and Compositions and Uses Thereof, for which we have made application for Letters Patent of the United States, said application having been filed July 6, 2001 and assigned Application No. 09/900,425; and

WHEREAS, ISIS Pharmaceuticals, Inc. hereinafter referred to as the assignee, of 2292 Faraday Avenue, Carlsbad CA, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee,

DOCKET NO.: ISPH-0522 PATENT

to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said successors, assigns, nominees, assignee, its representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said

DOCKET NO.: ISPH-0522

assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

DATED: 10-3 , 2001

Hong Nama Wu

PATENT

State of California)) ss.
County of San Diego)

On this 3rd day of Otober, 2001, before me, the undersigned, a Notary Public for the state, personally appeared Hongiang Wu, personally known to me/proved to me on the basis of satisfactory evidence to be the person who subscribed the foregoing Assignment and acknowledged to me that he she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

LANE B.D. SCHWARTZ
Commission # 1196197
Notary Public - California
San Diego County
My Comm. Expires Sep 13, 2002

WITNESS my hand and official seal.

Signature of Notary

DOCKET NO.: ISPH-0522 DATED: State of California ss. County of San Diego

On this \mathcal{L}^{τ} day of ex, 2001, before me, the undersigned, a Notary Public for the state, personally appeared Stanley T. Crooke, personally known to me/proved to me on the basis of satisfactory evidence to be the person who subscribed the foregoing Assignment and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

LANE B.D. SCHWARTZ

Commission # 1196197 Notary Public - California Son Diego County

WITNESS my hand and official seal.